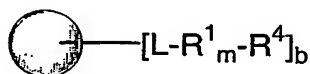



WHAT IS CLAIMED IS:

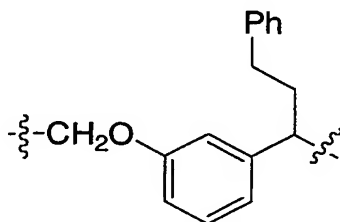
1. A process for the preparation of a compound of the formula I:



I

- 5 wherein

 is an insoluble solid support selected from the group consisting of: poly(styrene-divinylbenzene), macroreticular poly(styrene-divinylbenzene), polystyrene which is radiation grafted to polypropylene, polystyrene which is radiation grafted to polyethylene, polystyrene which is radiation grafted to poly(tetrafluoroethylene), and polystyrene which is radiation grafted to poly(ethylene-tetrafluoroethylene) wherein the insoluble solid support is in a shape selected from a bead, a tube, a rod, a ring, a disk, or a well; L is $-\text{CH}_2-$, $-\text{C}(\text{CH}_3)_2-$, $-\text{CH}(\text{CH}_3)-$, $-(\text{CH}_2)_n\text{CH}(\text{CN})-$, $-(\text{CH}_2)_n\text{CH}(\text{CO}_2\text{Me})-$, $-(\text{CH}_2)_n\text{CH}(\text{Ph})-$, $-(\text{CH}_2)_n\text{C}(\text{CH}_3, \text{Ph})-$, $-\text{CH}(\text{CH}_2\text{CH}_2\text{Ph})-$, or



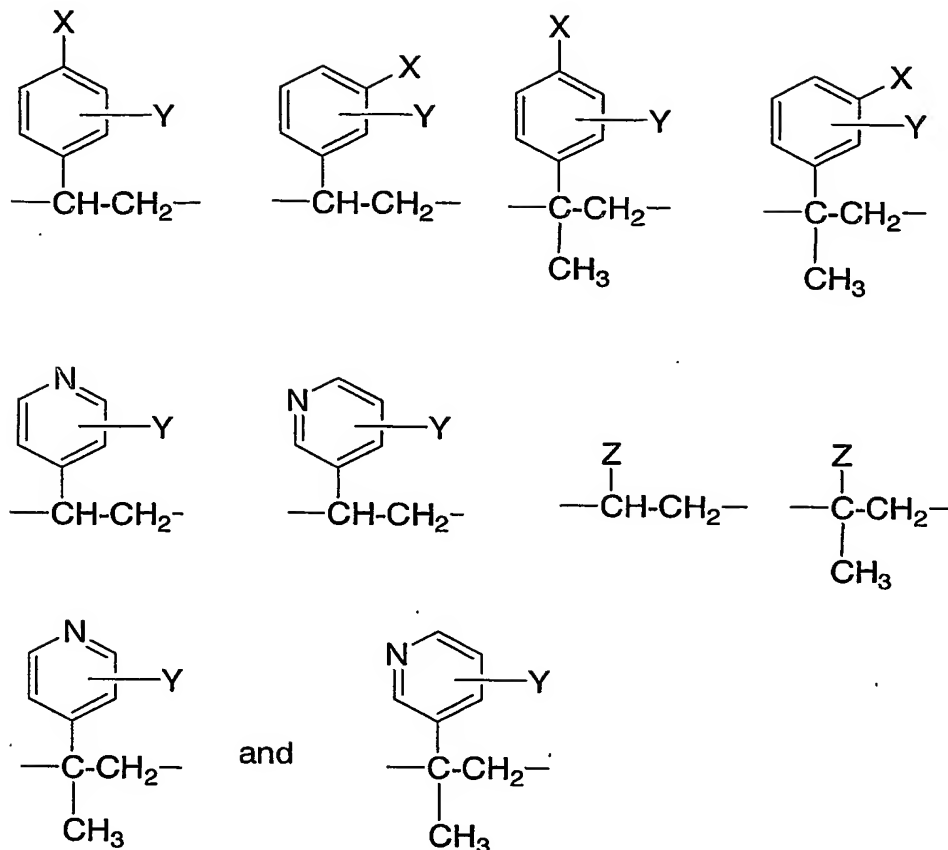
15

n is zero or an integer from 1 to 5;

m is zero or an integer from 1 to 100;

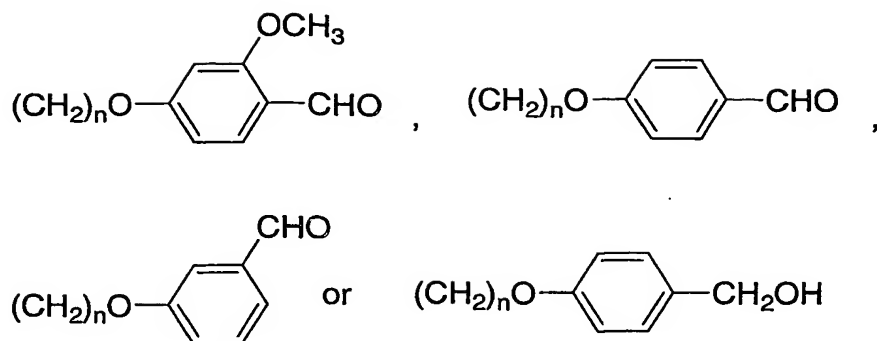
b is mMol content of initiator or solid-supported polymer per gram of insoluble solid support and is about 0.1 to about 5.0 mMol per gram;

- 20 R^1 is selected from:



wherein

- X is H, F, $(\text{CH}_2)_n\text{Cl}$, $(\text{CH}_2)_n\text{Br}$, $(\text{CH}_2)_n\text{I}$, $\text{B}(\text{OH})_2$, $(\text{CH}_2)_n\text{CH}=\text{CH}_2$, NCO , CH_2NCO , $\text{CH}(\text{CH}_3)\text{NCO}$, $\text{C}(\text{CH}_3)_2\text{NCO}$, CO_2Me , CO_2Et , $\text{CO}_2(\text{t-Bu})$, CO_2H , COC1 , $\text{CO}_2\text{CH}(\text{CF}_3)_2$, CO_2Ph , $\text{CO}_2(\text{pentafluorophenyl})$, $\text{CO}_2(\text{pentachlorophenyl})$, $\text{CO}_2(\text{N-succinimidyl})$, $\text{C}(\text{OMe})_3$, $\text{C}(\text{OEt})_3$, $(\text{CH}_2)_n\text{OH}$, $(\text{CH}_2)_n\text{CH}(\text{OH})\text{CH}_2\text{OH}$, $(\text{CH}_2)_n\text{SH}$, $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{SH}$, $(\text{CH}_2)_n\text{NHC}(=\text{S})\text{NH}_2$, $(\text{CH}_2)_n\text{NH}_2$, $(\text{CH}_2)_n\text{N}(\text{Me})_2$, $(\text{CH}_2)_n\text{N}(\text{Et})_2$, $(\text{CH}_2)_n(\text{iPr})_2$, $\text{CH}(\text{CH}_3)\text{NH}_2$, $\text{C}(\text{CH}_3)_2\text{NH}_2$, $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NH}_2$, $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NH}_2$, $\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{NH}_2)_2$, $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{NH}_2)_2$, $\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{OH})_2$, $(\text{CH}_2)_n(\text{morpholin-4-yl})$, $(\text{CH}_2)_n(\text{piperidin-1-yl})$, $(\text{CH}_2)_n(4\text{-methypiperazin-1-yl})$, $\text{N}(\text{SO}_2\text{CF}_3)_2$, $(\text{CH}_2)_n\text{CHO}$, $(\text{CH}_2)_n\text{Si}(\text{Me})_2\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{Et})_2\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{iPr})_2\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{tBu})_2\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{Ph})_2\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{Ph})(\text{tBu})\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{Me})_2\text{Cl}$, $(\text{CH}_2)_n\text{Si}(\text{Et})_2\text{Cl}$, $(\text{CH}_2)_n\text{Si}(\text{i-Pr})_2\text{Cl}$, $(\text{CH}_2)_n\text{Si}(\text{tBu})_2\text{Cl}$, $(\text{CH}_2)_n\text{Si}(\text{Ph})_2\text{Cl}$, $(\text{CH}_2)_n\text{Si}(\text{tBu})(\text{Ph})\text{Cl}$, $\text{P}(\text{Ph})_2$, $\text{P}(\text{o-tolyl})_2$,

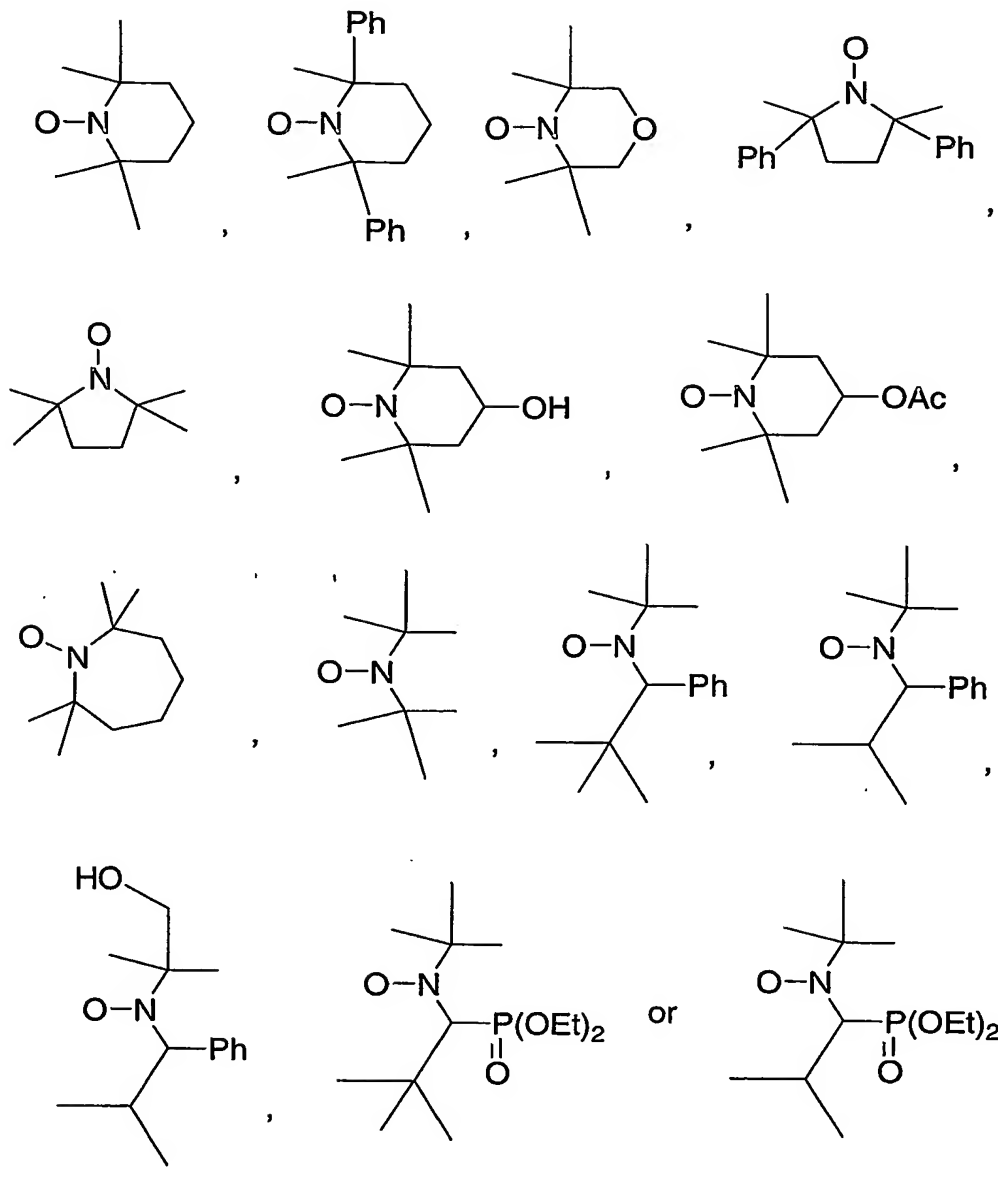


wherein n is zero or an integer from 1 to 5 ;

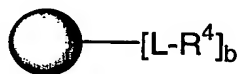
Y is H, Cl, Br, F, OH, or OMe;

5 Z is NCO, CO₂Me, CO₂Et, CO₂(i-Pr), CO₂(n-Bu), CO₂(t-Bu), CN, CO₂H, COCl, CO₂CH(CF₃)₂, CO₂(pentafluorophenyl), CO₂(pentachlorophenyl), CO₂Ph, CO₂(N—succinimidyl), C(OMe)₃, C(OEt)₂, CON(OCH₃)CH₃, CHO, CH₂OH, or C(CH₃)₂OH; and

R⁴ is

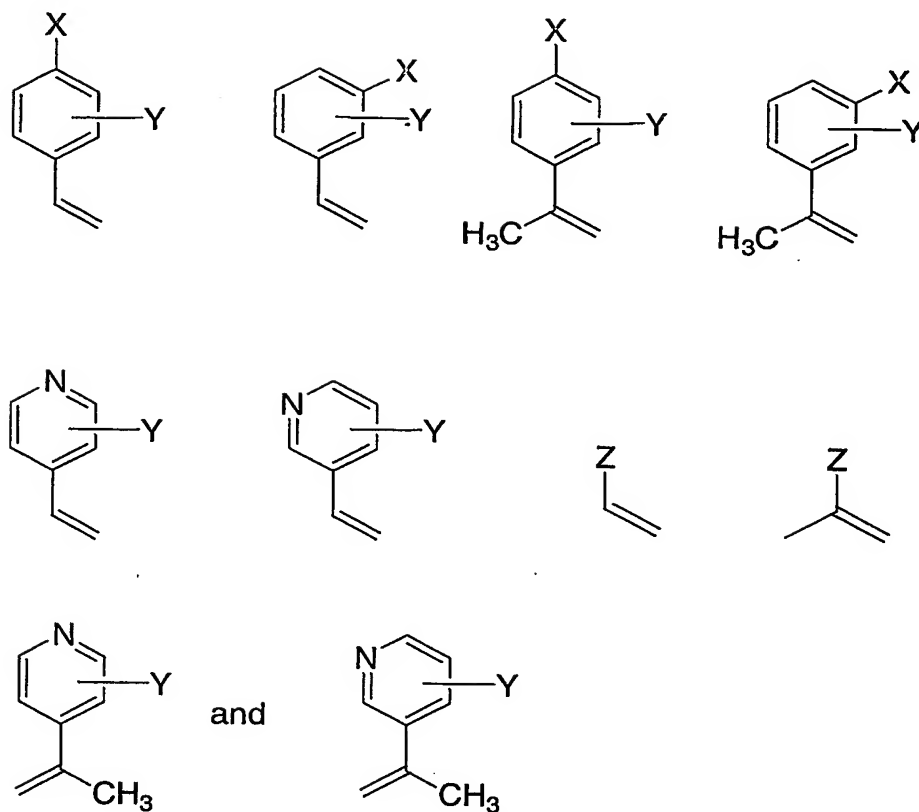


which comprises the step of microwave irradiating a mixture comprising a compound of the formula II

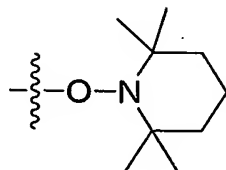


11

5 and a compound III selected from:

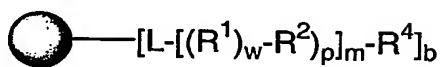


2. The process according to Claim 1 wherein R^4 is



5

3. A process for the preparation of a compound of the formula IV:



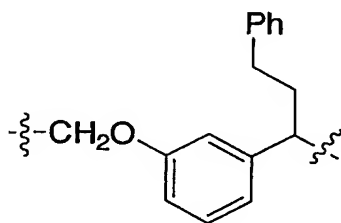
IV

wherein

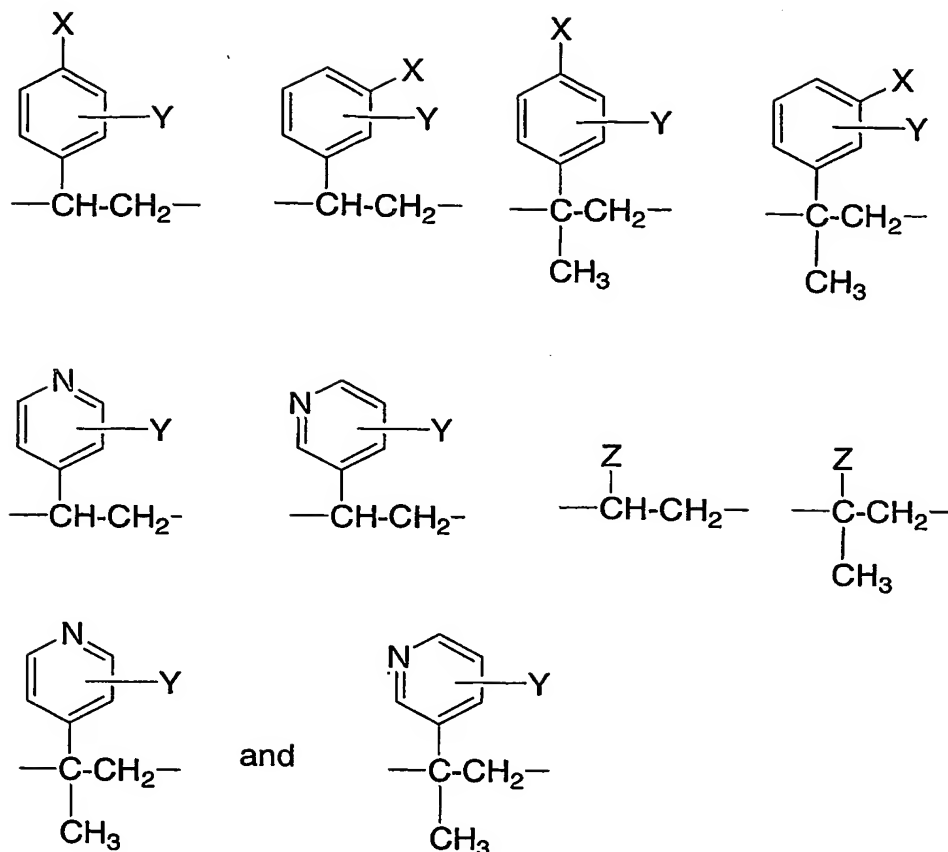


is an insoluble solid support selected from the group consisting of:

- poly(styrene-divinylbenzene), macroreticular poly(styrene-divinylbenzene), polystyrene which is radiation grafted to polypropylene, polystyrene which is radiation grafted to polyethylene, polystyrene which is radiation grafted to poly(tetrafluoroethylene), and polystyrene which is radiation grafted to poly(ethylene-tetrafluoroethylene) wherein the insoluble solid support is in a shape selected from a bead, a tube, a rod, a ring, a disk, or a well; L is $-\text{CH}_2-$, $-\text{C}(\text{CH}_3)_2-$, $-\text{CH}(\text{CH}_3)-$, $-(\text{CH}_2)_n\text{CH}(\text{CN})-$, $-(\text{CH}_2)_n\text{CH}(\text{CO}_2\text{Me})-$, $-(\text{CH}_2)_n\text{CH}(\text{Ph})-$, $-(\text{CH}_2)_n\text{C}(\text{CH}_3, \text{Ph})-$, $-\text{CH}(\text{CH}_2\text{CH}_2\text{Ph})-$, or

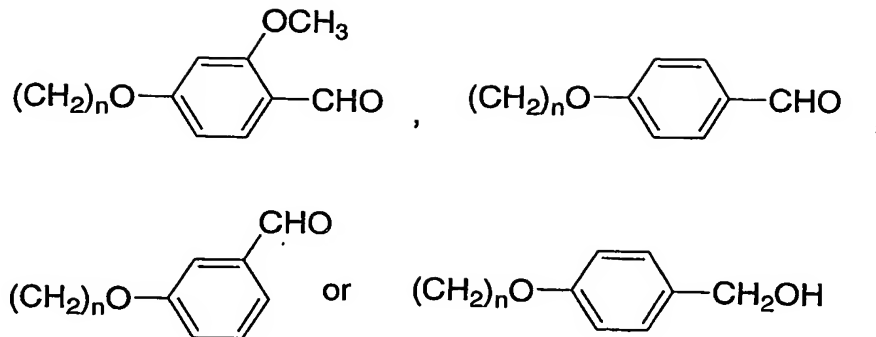


- 10 n is zero or an integer from 1 to 5;
 m is zero or an integer from 1 to 100;
 w is an integer from 1 to 10;
 p is zero or an integer from 1 to 10;
 b is mMol content of initiator or solid-supported polymer per gram of insoluble solid support and is about 0.1 to about 5.0 mMol per gram;
 15 R^1 and R^2 are each independently the same or different and are selected from



wherein

- X is H, F, $(\text{CH}_2)_n\text{Cl}$, $(\text{CH}_2)_n\text{Br}$, $(\text{CH}_2)_n\text{I}$, $\text{B}(\text{OH})_2$, $(\text{CH}_2)_n\text{CH}=\text{CH}_2$, NCO , CH_2NCO ,
 $\text{CH}(\text{CH}_3)\text{NCO}$, $\text{C}(\text{CH}_3)_2\text{NCO}$, CO_2Me , CO_2Et , $\text{CO}_2(\text{t-Bu})$, CO_2H , COCl ,
 5 $\text{CO}_2\text{CH}(\text{CF}_3)_2$, CO_2Ph , $\text{CO}_2(\text{pentafluorophenyl})$, $\text{CO}_2(\text{pentachlorophenyl})$,
 $\text{CO}_2(\text{N-succinimidyl})$, $\text{C}(\text{OMe})_3$, $\text{C}(\text{OEt})_3$, $(\text{CH}_2)_n\text{OH}$, $(\text{CH}_2)_n\text{CH}(\text{OH})\text{CH}_2\text{OH}$,
 $(\text{CH}_2)_n\text{SH}$, $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{SH}$, $(\text{CH}_2)_n\text{NHC}(=\text{S})\text{NH}_2$, $(\text{CH}_2)_n\text{NH}_2$,
 $(\text{CH}_2)_n\text{N}(\text{Me})_2$, $(\text{CH}_2)_n\text{N}(\text{Et})_2$, $(\text{CH}_2)_n(\text{iPr})_2$, $\text{CH}(\text{CH}_3)\text{NH}_2$, $\text{C}(\text{CH}_3)_2\text{NH}_2$,
 $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NH}_2$, $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NH}_2$,
 10 $\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{NH}_2)_2$, $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{NH}_2)_2$, $\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{OH})_2$,
 $(\text{CH}_2)_n(\text{morpholin-4-yl})$, $(\text{CH}_2)_n(\text{piperidin-1-yl})$, $(\text{CH}_2)_n(4\text{-methypiperazin-1-yl})$,
 $\text{N}(\text{SO}_2\text{CF}_3)_2$, $(\text{CH}_2)_n\text{CHO}$, $(\text{CH}_2)_n\text{Si}(\text{Me})_2\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{Et})_2\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{iPr})_2\text{H}$,
 $(\text{CH}_2)_n\text{Si}(\text{tBu})_2\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{Ph})_2\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{Ph})(\text{tBu})\text{H}$,
 $(\text{CH}_2)_n\text{Si}(\text{Me})_2\text{Cl}$, $(\text{CH}_2)_n\text{Si}(\text{Et})_2\text{Cl}$, $(\text{CH}_2)_n\text{Si}(\text{i-Pr})_2\text{Cl}$, $(\text{CH}_2)_n\text{Si}(\text{tBu})_2\text{Cl}$,
 15 $(\text{CH}_2)_n\text{Si}(\text{Ph})_2\text{Cl}$, $(\text{CH}_2)_n\text{Si}(\text{tBu})(\text{Ph})\text{Cl}$, $\text{P}(\text{Ph})_2$, $\text{P}(\text{o-tolyl})_2$,

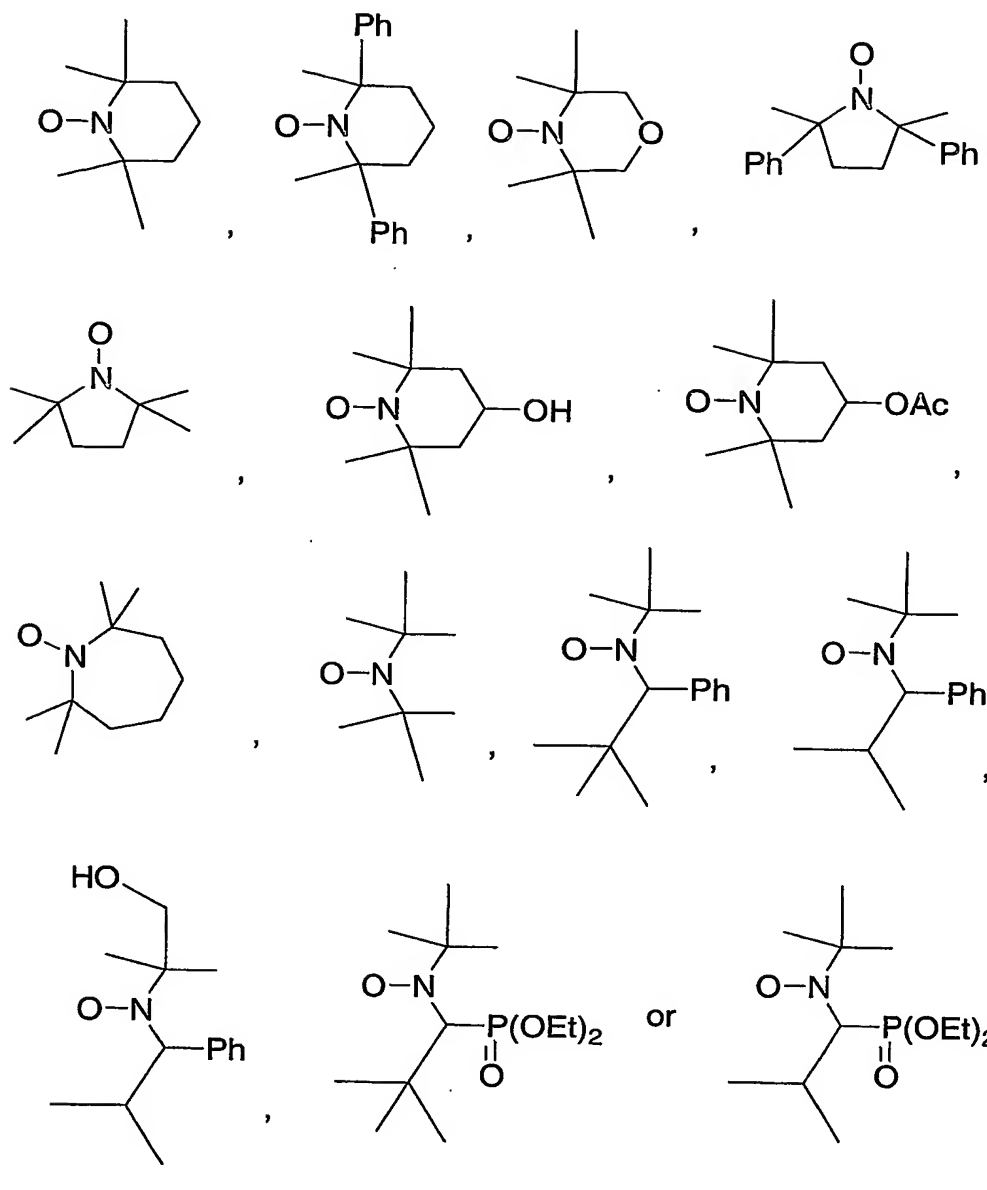


wherein n is zero or an integer from 1 to 5;

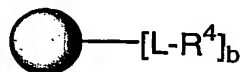
Y is H, Cl, Br, F, OH, or OMe;

5 Z is NCO, CO₂Me, CO₂Et, CO₂(i-Pr), CO₂(n-Bu), CO₂(t-Bu), CN, CO₂H, COCl, CO₂CH(CF₃)₂, CO₂(pentafluorophenyl), CO₂(pentachlorophenyl), CO₂Ph, CO₂(N-succinimidyl), C(OMe)₃, C(OEt)₂, CON(OCH₃)CH₃, CHO, CH₂OH, or C(CH₃)₂OH; and

R⁴ is

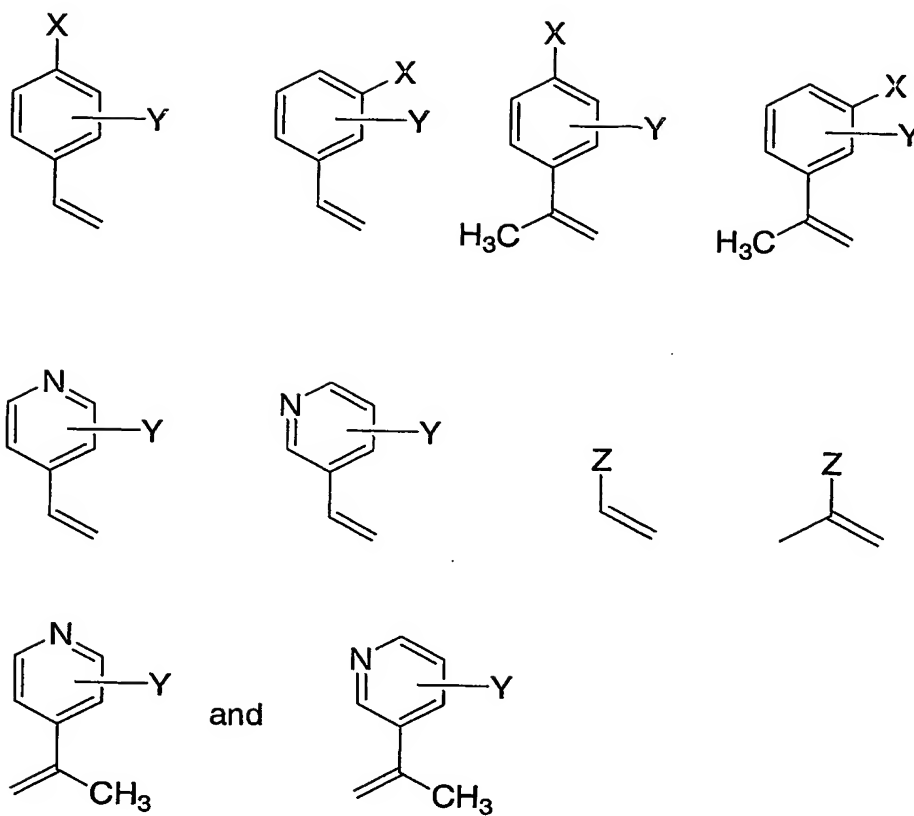


which comprises the step of microwave irradiating a mixture comprising a compound of the formula II

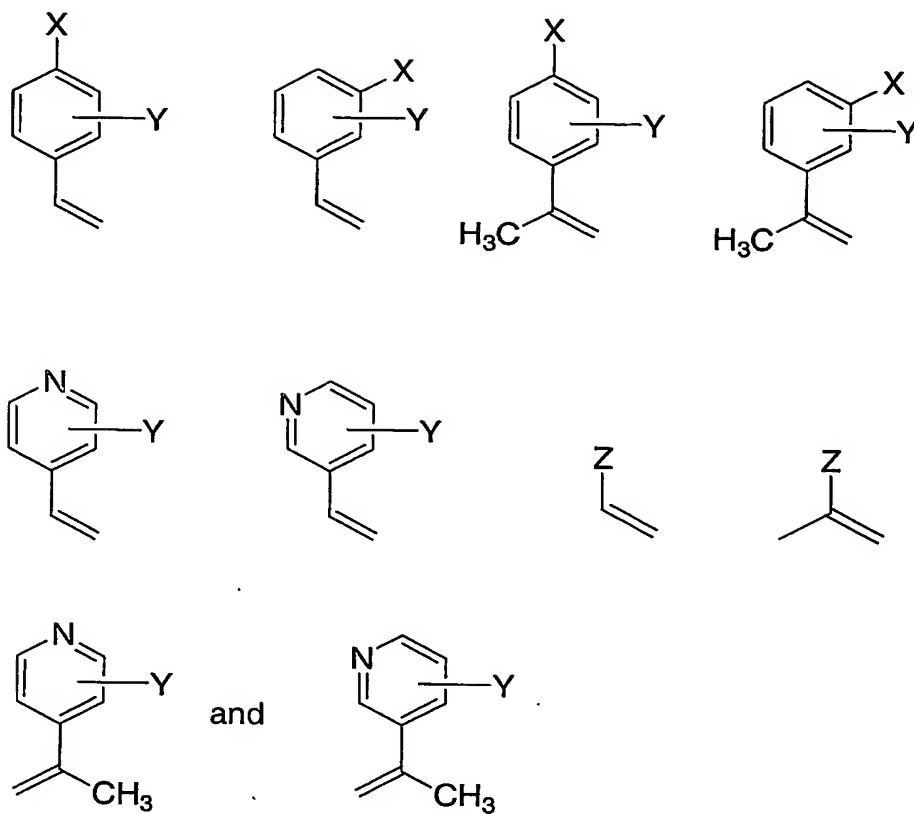


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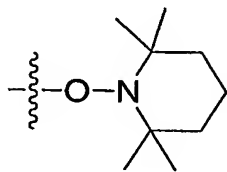
5 a compound III selected from:



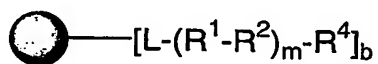
and a compound V selected from:



4. The process according to Claim 3 wherein R^4 is



5. A process for the preparation of a compound of the formula
- 5 VI:



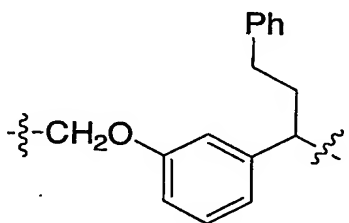
VI

wherein

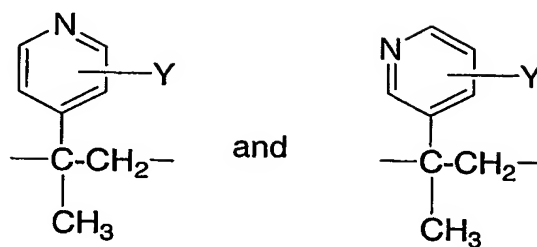
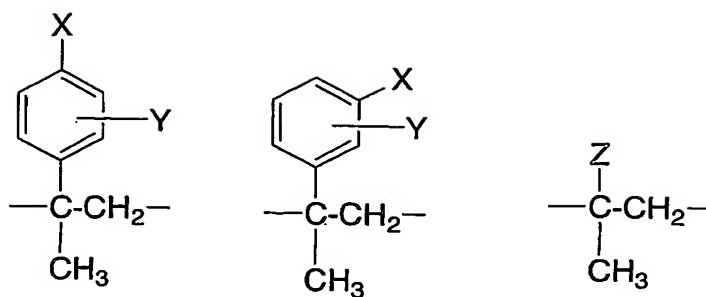


is an insoluble solid support selected from the group consisting of:

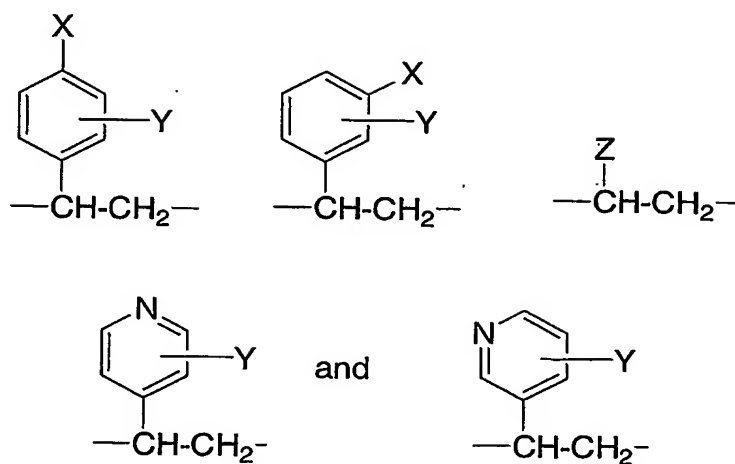
- poly(styrene-divinylbenzene), macroreticular poly(styrene-divinylbenzene), polystyrene which is radiation grafted to polypropylene, polystyrene which is radiation grafted to polyethylene, polystyrene which is radiation grafted to poly(tetrafluoroethylene), and polystyrene which is radiation grafted to poly(ethylene-tetrafluoroethylene) wherein the insoluble solid support is in a shape selected from a bead, a tube, a rod, a ring, a disk, or a well; L is $-\text{CH}_2-$, $-\text{C}(\text{CH}_3)_2-$, $-\text{CH}(\text{CH}_3)-$, $-(\text{CH}_2)_n\text{CH}(\text{CN})-$, $-(\text{CH}_2)_n\text{CH}(\text{CO}_2\text{Me})-$, $-(\text{CH}_2)_n\text{CH}(\text{Ph})-$, $-(\text{CH}_2)_n\text{C}(\text{CH}_3, \text{Ph})-$, $-\text{CH}(\text{CH}_2\text{CH}_2\text{Ph})-$, or



- 10 n is zero or an integer from 1 to 5;
 m is zero or an integer from 1 to 100;
 w is an integer from 1 to 10;
 p is zero or an integer from 1 to 10;
 b is mMol content of initiator or solid-supported polymer per gram of insoluble solid
 15 support and is about 0.1 to about 5.0 mMol per gram;
 R¹ is selected from



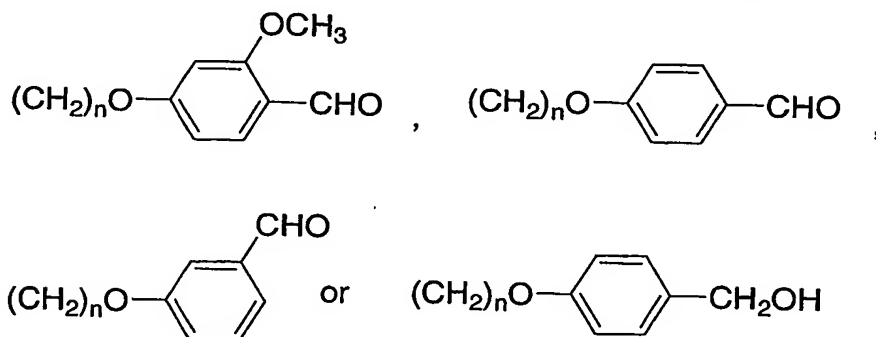
R² is selected from



wherein

- 5 X is H, F, (CH₂)_nCl, (CH₂)_nBr, (CH₂)_nI, B(OH)₂, (CH₂)_nCH=CH₂, NCO, CH₂NCO, CH(CH₃)NCO, C(CH₃)₂NCO, CO₂Me, CO₂Et, CO₂(t-Bu), CO₂H, COCl, CO₂CH(CF₃)₂, CO₂Ph, CO₂(pentafluorophenyl), CO₂(pentachlorophenyl), CO₂(N-succinimidyl), C(OMe)₃, C(OEt)₃, (CH₂)_nOH, (CH₂)_nCH(OH)CH₂OH, (CH₂)_nSH, CH₂NHCH₂CH₂SH, (CH₂)_nNHC(=S)NH₂, (CH₂)_nNH₂,
 10 (CH₂)_nN(Me)₂, (CH₂)_nN(Et)₂, (CH₂)_n(iPr)₂, CH(CH₃)NH₂, C(CH₃)₂NH₂,

$\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NH}_2$, $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NH}_2$,
 $\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{NH}_2)_2$, $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{NH}_2)_2$, $\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{OH})_2$,
 $(\text{CH}_2)_n(\text{morpholin-4-yl})$, $(\text{CH}_2)_n(\text{piperidin-1-yl})$, $(\text{CH}_2)_n(4\text{-methypiperazin-1-yl})$,
 $\text{N}(\text{SO}_2\text{CF}_3)_2$, $(\text{CH}_2)_n\text{CHO}$, $(\text{CH}_2)_n\text{Si}(\text{Me})_2\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{Et})_2\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{iPr})_2\text{H}$,
 $(\text{CH}_2)_n\text{Si}(\text{tBu})_2\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{Ph})_2\text{H}$, $(\text{CH}_2)_n\text{Si}(\text{Ph})(\text{tBu})\text{H}$,
 $(\text{CH}_2)_n\text{Si}(\text{Me})_2\text{Cl}$, $(\text{CH}_2)_n\text{Si}(\text{Et})_2\text{Cl}$, $(\text{CH}_2)_n\text{Si}(\text{i-Pr})_2\text{Cl}$, $(\text{CH}_2)_n\text{Si}(\text{tBu})_2\text{Cl}$,
 $(\text{CH}_2)_n\text{Si}(\text{Ph})_2\text{Cl}$, $(\text{CH}_2)_n\text{Si}(\text{tBu})(\text{Ph})\text{Cl}$, $\text{P}(\text{Ph})_2$, $\text{P}(\text{o-tolyl})_2$,

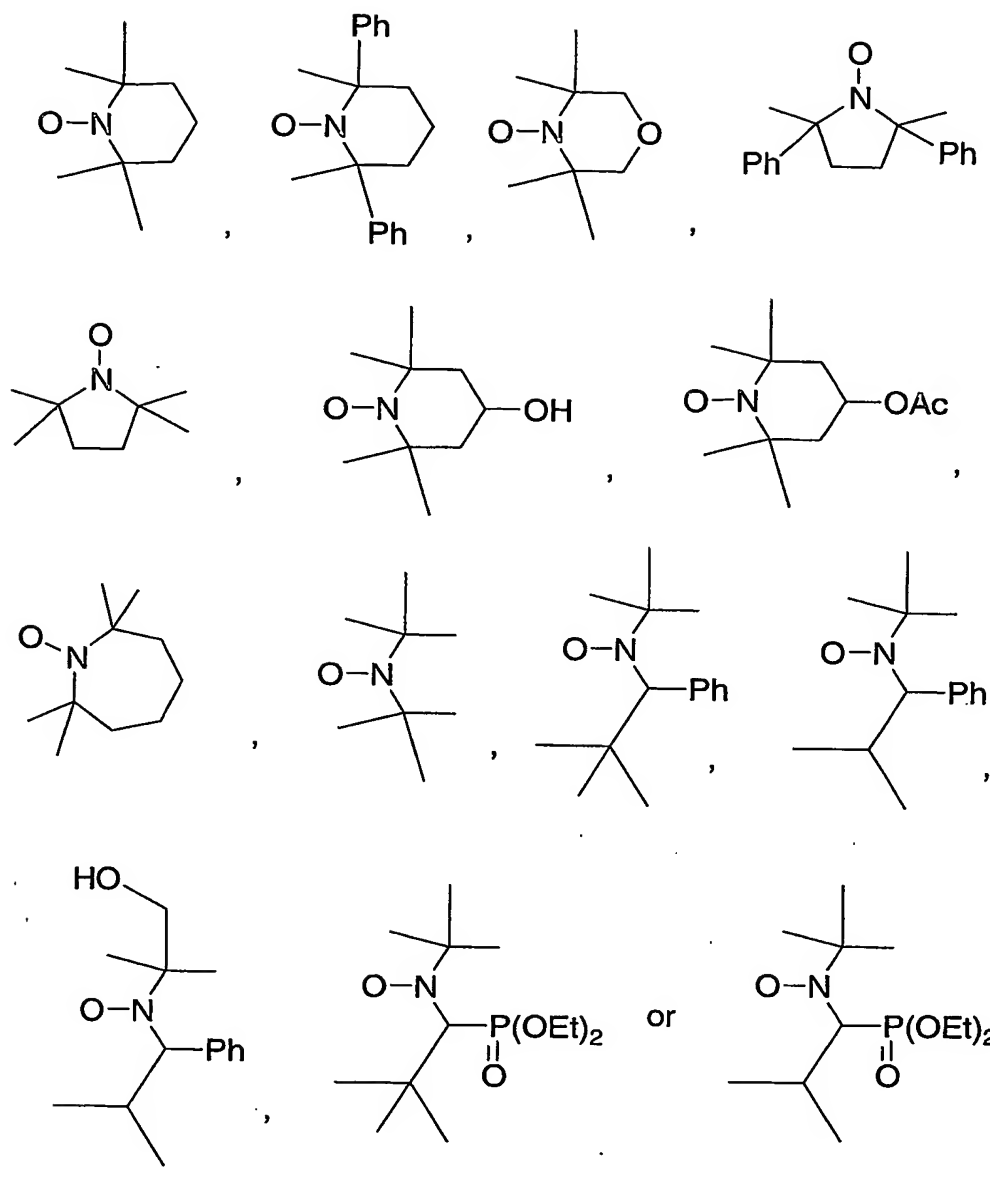


wherein n is zero or an integer from 1 to 5;

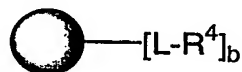
10 Y is H, Cl, Br, F, OH, or OMe;

Z is NCO, CO_2Me , CO_2Et , $\text{CO}_2(\text{i-Pr})$, $\text{CO}_2(\text{n-Bu})$, $\text{CO}_2(\text{t-Bu})$, CN, CO_2H , COCl ,
 $\text{CO}_2\text{CH}(\text{CF}_3)_2$, $\text{CO}_2(\text{pentafluorophenyl})$, $\text{CO}_2(\text{pentachlorophenyl})$, CO_2Ph ,
 $\text{CO}_2(\text{N-succinimidyl})$, $\text{C}(\text{OMe})_3$, $\text{C}(\text{OEt})_2$, $\text{CON}(\text{OCH}_3)\text{CH}_3$, CHO , CH_2OH ,
 or $\text{C}(\text{CH}_3)_2\text{OH}$; and

15 R^4 is

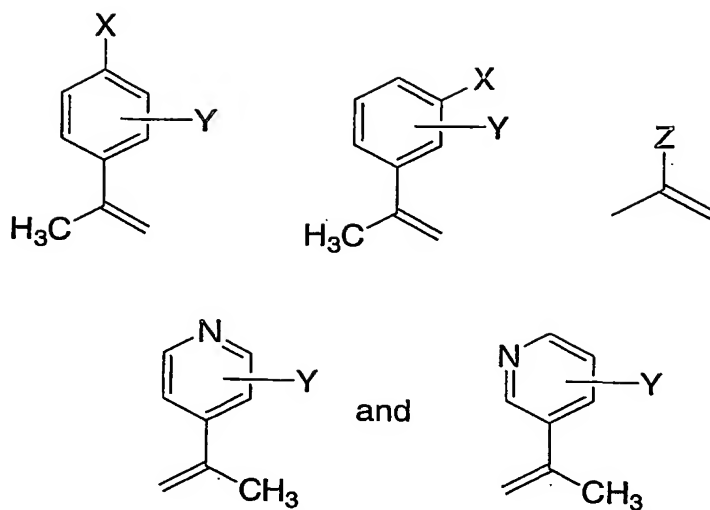


which comprises the step of microwave irradiating a mixture comprising a compound of the formula II

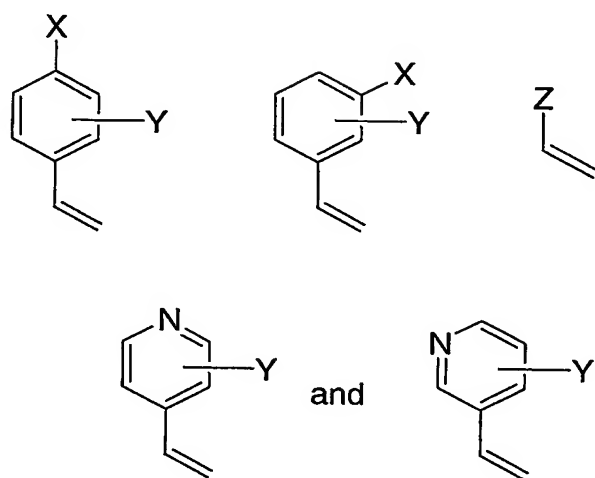


II ,

5 a compound VII selected from:

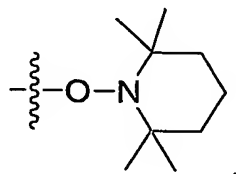


and a compound VIII selected from:

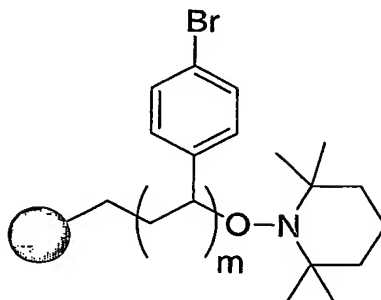



5 wherein the ratio of the compound VII and the compound VIII is about 2:1.

6. The process according to Claim 5 wherein R^4 is

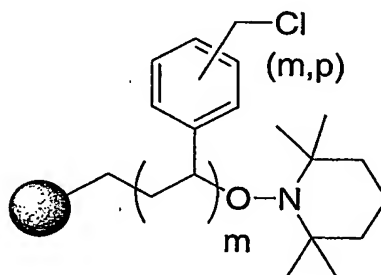



7. A compound which is



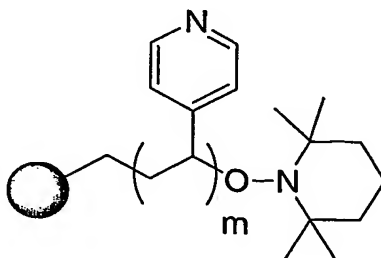
wherein  is a polystyrene resin, m is from 1 to 100 and the bromine content is
5 from about 4 to about 6 mmol/gram of resin.


8. A compound which is



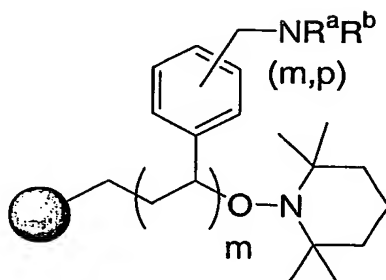
wherein  is a polystyrene resin, m is from 1 to 100 and the chlorine content is
10 from about 5 to about 7 mmol/gram of resin.

9. A compound which is




wherein  is a polystyrene resin, m is from 1 to 100 and the pyridyl content is from about 5 to about 7 mmol/gram of resin.

10. A compound which is

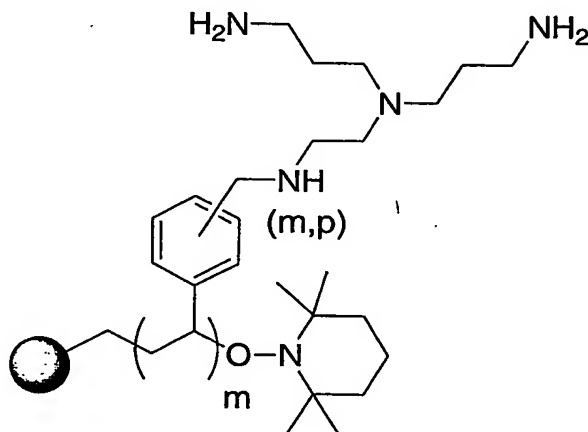



5

wherein  is a polystyrene resin, m is from 1 to 100, $-NR^aR^b$ is selected from diethylamino, diisopropylamino, piperidinyl, morpholino and piperazinyl and the amine content is from about 4 to about 7 mmol/gram of resin.

10

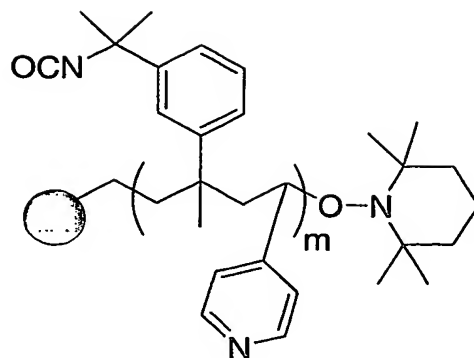
11. A compound which is




wherein  is a polystyrene resin, m is from 1 to 100, and the amine content is from about 3 to about 6 mmol/gram of resin.

15

12. A compound which is



wherein  is a polystyrene resin, m is from 1 to 100, and the isocyanate content is from about 1 to about 4 mmol/gram of resin.